

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474

T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

## **NOTICE OF ACCEPTANCE (NOA)**

StormBlok System, Inc. 972 Alderman Road Palmyra, NY 14522

#### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

## DESCRIPTION: "StormBlok Hurricane Protection System" Flexible Wind Abatement System

**APPROVAL DOCUMENT:** Drawing No. 13-111-SB-HPS-ER, titled "StormBlok Hurricane Protection System", sheets 1 through 12 of 12, prepared by CBuck Engineering, last revision dated January 31, 2014, signed and sealed by James L. Buckner, P.E., on February 04, 2014, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval date by the Miami-Dade County Product Control Section.

## MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each screen shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved" and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above. The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY
APPROVED

He C. A. Nola 02/20/2014 NOA No. 13-0916.05 Expiration Date: 02/20/2019 Approval Date: 02/20/2014 Page 1

### StormBlok System, Inc.

## NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. 13-111-SB-HPS-ER, titled "StormBlok Hurricane Protection System", sheets 1 through 12 of 12, prepared by CBuck Engineering, last revision dated January 31, 2014, signed and sealed by James L. Buckner, P.E., on February 04, 2014.

#### B. TESTS

- 1. Test report on Large Missile Impact Test, Static Wind Pressure Test, and Cyclic Wind Pressure Test of **StormBlok System**, prepared by Hurricane Test Laboratory, Inc., Report No. T483-1001-08, dated September 04, 2009, signed and sealed by Steven R. Samuels, P.E.
- 2. Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of StormBlok System, prepared by Architectural Testing, Report No.C3374.01-109-18, dated January 02, 2013, signed and sealed by Michael D. Stremmel, P.E.

#### C. CALCULATIONS

1. Anchor calculations, dated July 12, 2013, pages 1 through 5 of 5, prepared by CBuck Engineering, signed and sealed by James L. Buckner, P.E.

#### D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

#### E. MATERIAL CERTIFICATIONS

1. Woven fabric analysis Inspection Report # 1204-289-66638A, dated June 18, 2013, with composition and physical properties.

Heimy A. Makar, P.E., M.S. Product Control Unit Supervisor

> NOA No. 13-0916.05 Expiration Date: 02/20/2019 Approval Date: 02/20/2014

# **Engineering Report & Drawings**

# **StormBlok Hurricane Protection System**

# Manufacturer StormBlok Systems, Inc.

For

Miami-Dade Notice of Acceptance

Category: **Flexible Wind Abatement Systems** 

**Product Assembly Name:** 

StormBlok Hurricane Protection System

## Prepared by:

James L. Buckner, P.E., SECB Florida Professional Engineer # 31242 Project Manager: Youry Demosthenes Report No.: 13-111-SB-HPS-ER

Date: 8 / 20 / 13 Revision: 1/31/14

Contents:

Cover Page: **Evaluation:** 

**Drawings & Details:** 

Page 1

Pages 2-7

Pages 8 - 12

Approved as complying with the Florida Building Code

Date 02/20/20/4 NOAW 13-09/6 Miami Dade Product Control

TITLE: ENGINEERING REPORT

For StormBlok Hurricane Protection System

CBUCK Engineering

CBUCK, Inc. COA #8054 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

MANUFACTURER:

StormBlok Systems, Inc. 972 Alderman Road Palmyra, NY 14522

DATE: 8/20/13 PAGE #: 1 OF 12 13-111-SB-HPS-ER REPORT #:

DRAWN BY: YD

#### 1.0 Product

1.1 Manufacturer:

StormBlok Systems, Inc.

1.2 Product Name:

Stormblok Hurricane Protection System

#### 2.0 Evaluation Scope:

#### 2.1 Evaluation Criteria:

Florida Building Code (FBC) 2010

Code Section:

High Velocity Hurricane Zone (HVHZ)

Miami-Dade County Department of Regulatory and Economic Resources Product Control Section Checklist

And Testing Application Standards TAS 201, 202 and 203.

#### 2.2 Evaluation Classification:

Category:

**Flexible Wind Abatement Systems** 

#### 2.3 Properties Evaluated:

Wind Resistance Properties **Uniform Static Air Pressure** Large Missile Impact Cyclic Wind Pressure

#### 2.4 Limits of Evaluation:

This product is limited to compliance with Miami-Dade Testing Application Standards TAS 201, 202 and 203 and Acceptance Criteria #235.

#### 3.0 Evaluated Uses:

The StormBlok Hurricane Protection System as evaluated in this report is used as an temporary protection against wind borne debris during a hurricane or wind storm events.

#### 4.0 Product General Description:

The StormBlok Hurricane Protection System is a flexible wind abatement and impact protection system. It is used as a temporary protection system in both residential and commercial applications. The StormBlok Hurricane Protection System is designed of a pyramidical shape assembly. The assembly consists of a protective textile fabric cover and a structural core made of extruded fiberglass and metal framing. The assembly is attached to the support by mechanical fasteners. The support can be vertical or inclined.

#### 5.0 Evaluated Sizes:

Pyramid Base:

4 ft × 5 ft Maximum

Pyramid Height:

22" - 36"

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TITLE: ENGINEERING REPORT

For StormBlok Hurricane Protection System

CBUCK Engineering COA #8064

CBUCK, Inc. 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

MANUFACTURER:

StormBlok Systems, Inc. 972 Alderman Road Palmyra, NY 14522

DATE: 8/20/13 PAGE #: 2 OF 12

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#### 6.0 Performance:

#### 6.1.1 Uniform Static Air Pressure:

Standard:

TAS 202

Design Pressure:

Positive

Mogativ

Negative - 60 psf

+ 50 psf

(Note: Design Pressure with Protocol safety factor)

#### 6.1.2 Impact Rating:

Type:

Large Missile Impact

Standard:

**TAS 201** 

Results:

Passed

#### 6.1.3 Cyclic Wind Pressure:

Standard:

**TAS 203** 

Results:

Passed

#### 7.0 Support Anchorage:

The following is the minimum physical properties to support the design load in this report:

7.1 Concrete Masonry Unit (CMU)

Compressive Strength:

1,900 psi Minimum

Standard:

ASTM C90

#### 7.2 Wood framing

Type:

Dimensional Lumber

Density/Specific Gravity:

0.42 Minimum

Dimension:

2 × 4 Minimum

#### 8.0 Code Compliance

8.1 Product meets the High Velocity Hurricane Zone (HVHZ) Requirements of the Florida Building Code (FBC) 2010 for the properties evaluated.

#### 9.0 Limitations of Use:

- 9.1 Seasonal or permanent installation of the StormBlok Hurricane Protection System in areas exposed to sunlight and/or other weathering conditions is outside the scope of this evaluation.
- 9.2 Verification of the structural adequacy of support anchorage component is beyond the scope of this evaluation.

#### 10.0 Identification:

10.1 Each panel of fabric shall bear a permanent label with the manufacturer's name or logo, manufacturing plant's city, state, model/series and the following statement: "Miami-Dade County Product Control Approved".

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Florida Building Code Date 02/20/20

NOA# 13 - 0916.05 Miami Dade Product Control

Miami Dade Product Contro

TITLE: ENGINEERING REPORT

For StormBlok Hurricane Protection System

JAMES L. BUCKNER, P.E.

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4

CBUCK Engineering

W. Palm Beach, FL 33403 (561) 491-9927

MANUFACTURER:

StormBlok Systems, Inc. 972 Alderman Road Palmyra, NY 14522 DATE: 8/20/13
PAGE #: 3 OF 12

REPORT #: 13-111-SB-HPS-ER

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#### 11.0 Components of the Assembly Evaluated

#### StormBlok Cover 11.1

Part #:

601

Manufacturer:

Stafford Textiles Limited

Product Name:

Staftex DYN/1919

Fabric Material:

Woven Polyester

Fabric Material Thickness:

35 mil Nominal

**Material Properties:** 

**Grab Textile Strength:** 

965 × 1,034 lbs

Per ASTM D4632

Puncture Strength:

341 lbs

Per ASTM D4833

**Trapezoidal Tearing Strength: Bursting Strength:** 

553 × 515 lbs

Per ASTM D4533

> 750 psi

Per ASTM D3786

Apparent Opening Size (AOS)

2.95 mil

Per ASTM D4751

#### 11.2 Turret

Part #:

050

Metal Supermarkets

Manufacturer:

Steel

Material: Thickness:

3/16"

Overall Dimension:

3" L × 3" W × 1-1/8" H

Quantity per assembly:

#### **Compression Spring Music Wire** 11.3

Part #:

301

Manufacturer:

McMaster-Carr (Part ID: 9657K94)

Material:

**Outside Diameter:** 

5/8" Nominal

Quantity per assembly:

#### 11.4 Rods

Manufacturer:

Curbell

Material:

**Extruded Fiberglass** 

Tensile Strength:

90 ksi

**Outside Diameter:** 

3/4"

<u> Part #:</u>	<u>Rod Name:</u>	<u>Length:</u>	<u>Quantity:</u>
101	Corner Rod	38"	4
102	End Rod	33"	2
103	Side Rod	27"	2
104	Cross-Top Corner Rod	39-3/4"	1
105	Cross-Side Rod	25-3/4"	1
106	Cross-End Rod	35-1/4"	1
107	Cross-Bottom Corner Rod	44-1/2"	1

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For StormBlok Hurricane Protection System

CBLICK Engineering

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403

(561) 491-9927

TITLE: ENGINEERING REPORT

972 Alderman Road

MANUFACTURER:

StormBlok Systems, Inc. Palmyra, NY 14522

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AMES L. BUCKNER, P.E.

11.5 Spring Rod - End

Part #:

001

Manufacturer:

Metal Supermarkets

Material:

Aluminum 6061 T6

Alloy: Inside Diameter

Outside Diameter:

0.742"

1.050"

Length:

6"

Quantity per assembly:

8

11.6 Hub Rod - End

Part #:

002

Manufacturer:

Metal Supermarkets

Material:

Aluminum

Alloy:

6061 T6 0.750"

Inside Diameter Outside Diameter:

1.000"

Length:

Quantity per assembly:

3.5" 8

11.7 Cross - Support Rod - End

Part #:

010

Manufacturer:

Metal Supermarkets

Material:

Aluminum

Alloy:

6061 T6

Inside Diameter

0.742"

**Outside Diameter:** 

1.050" 3"

Length:

Quantity per assembly:

8

11.8 **Cross - Support Brace** 

Part #:

011

Manufacturer:

Metal Supermarkets

Material:

Aluminum 6061 T6

Alloy:

Refer to Drawing

**Dimensions:** 

Quantity per assembly:

11.9 **Hub Ring** 

Part #:

201

Manufacturer:

Metal Supermarkets

Material:

Steel

Thickness:

3/8"

Inside Diameter

4.5"

**Outside Diameter:** 

4.875"

Date 02/20 NOA#13-09 Miami Dade Product

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1

Quantity per assembly:

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JAMES L. BUCKNER, P.E.

COUCK Engineering

COA #8064 CBUCK, Inc. 1399 N. Killian Dr., Ste 4

W. Palm Beach, FL 33403 (561) 491-9927

MANUFACTURER:

StormBlok Systems, Inc. 972 Alderman Road

Palmyra, NY 14522

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11.10 Hub Plug

Part #:

202

Manufacturer:

McMaster-Carr

Material:

**Neoprene Spring Rubber** 

Dimensions:

Refer to Drawing

Quantity per assembly:

11.11 Assembly Fasteners

Part #:	<u> Manufacturer:</u>	Part ID:	<u>Type:</u>	<u>Size:</u>	Quantity:
401	McMaster-Carr	91251A546	Socket Head Cap Screw	1/4"-20 × 1-1/2"	32
402	McMaster-Carr	91251A548	Socket Head Cap Screw	1/4"-20 × 1-3/4"	16
403	McMaster-Carr	91251A544	Socket Head Cap Screw	1/4"-20 × 1-1/4"	8
410	McMaster-Carr	95615A120	Steel Nylon-Insert Hex Locknut	1/4"-20 Thread	48
411	McMaster-Carr	90532A200	Steel Acorn Nut	1/4"-20 Thread	8

11.12 Support Fastener

Part #:

501

Manufacturer:

**Buildex** 

Type:

**Tapcon Concrete Anchor** 

Size:

1/4" × 1-3/4"

Minimum Embedment:

1-1/4"

Minimum Edge distance:

1"

Quantity per assembly:

80

11.13 Lashing Strap with Non-Slip Cam Buckle (Factory Installed)

Part #:

Manufacturer:

Big Top (Part ID: 40058-3VGA)

Material:

Polyester Webbing

Width:

1" Wide

Quantity per assembly:

24

11.14 Footmans Loops

Part #:

701

Manufacturer:

Bosun Supplies (Part ID: S3710)

Material:

Stainless Steel

Dimension:

Refer to Component Drawing

Quantity per assembly:

24

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For StormBlok Hurricane Protection System

ÍAMES L. BUCKNER, P.E.

CBUCK Engineering COA #8064 CBUCK, Inc.

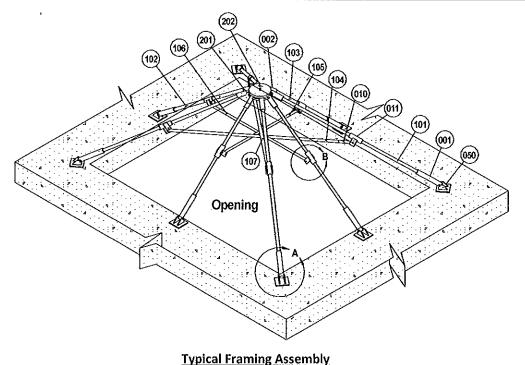
1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403

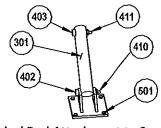
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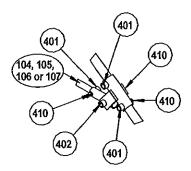
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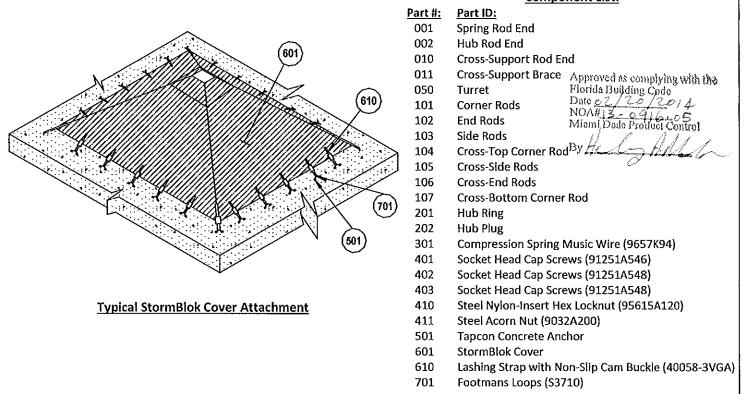
Typical Rod Attachment to Support

<u>Detail A</u>



Typical Rod Framing Attachment
Detail B

## Component List:



Not To Scale

JAMES L. BUCKNER, P.E. FLORIDA P. 5. #31242

# TITLE: INSTALLATION DRAWINGS For StormBlok Hurricane Protection System

CBUCK, Inc. COA #8064
1399 N. Killian Dr., Ste 4
W. Palm Beach, FL 33403
(561) 491-9927

StormBlok Systems, Inc. 972 Alderman Road Palmyra, NY 14522

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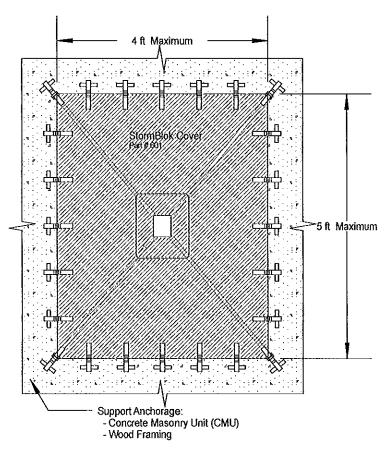
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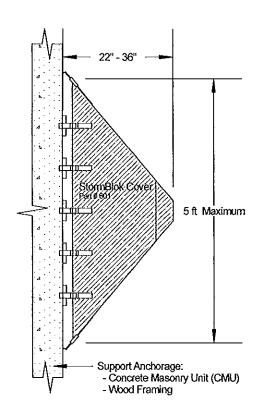
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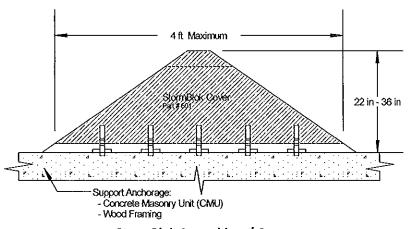
REVISION: 1/31/14





StormBlok Assembly w/ Cover **Typical Side Section View** 

## StormBlok Assembly Elevation w/ Cover **Typical Plan View**



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NOA#13-0916-05
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StormBlok Assembly w/ Cover **Typical Side Section View** 

Not To Scale

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## TITLE: INSTALLATION DRAWINGS

For StormBlok Hurricane Protection System

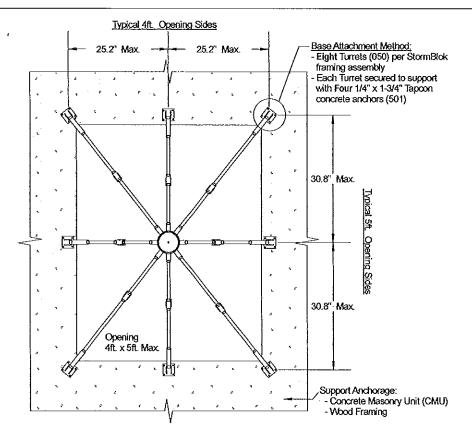
CBUCK Engineering

CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927

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StormBlok Systems, Inc. 972 Alderman Road Palmyra, NY 14522

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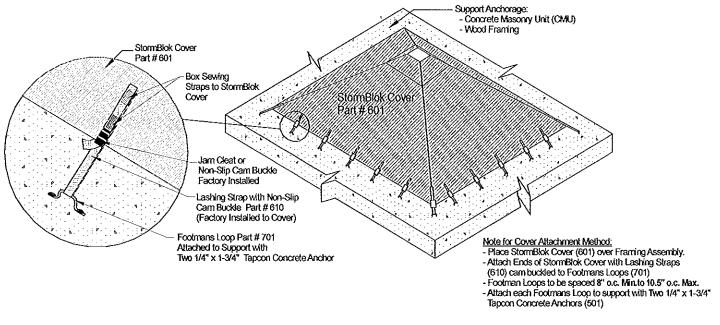


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Date 02/20/20/4 NOAW 13-09/6-05 Miami Dade Product Control

Miami Dade Product Control

#### **Typical Framing Attachment to Support**



#### Typical StormBlok Cover Attachment to Support

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For StormBlok Hurricane Protection System

CBUCK Engineering

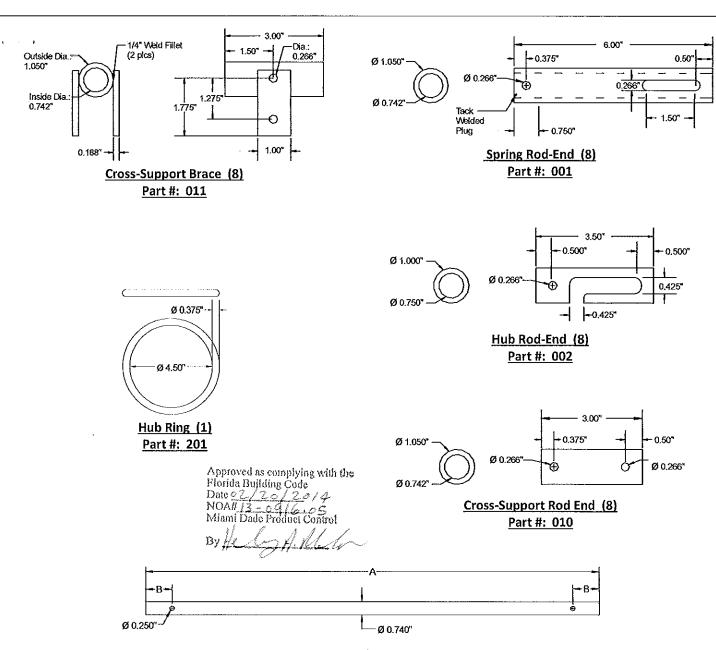
CBUCK, Inc. COA #8064 1399 N. Killian Dr., Ste 4 W. Palm Beach, FL 33403 (561) 491-9927 MANUFACTURER:

StormBlok Systems, Inc. 972 Alderman Road Palmyra, NY 14522 DATE: 8/20/13

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#### <u>Rods</u>

Part#	Rod Name	Quantity	<u>A</u>	<u>B</u>
101	Corner Rod	4	38.00"	2.00"
102	End Rod	2	33.00"	2.00"
103	Side Rod	2	27.00"	2.00"
104	Cross-Top Corner Rod	1	39.75"	1.50"
105	Cross-Side Rod	1	25.75"	1.50"
106	Cross-End Rod	1	35.25"	1.50"
107	Cross-Bottom Corner Rod	1	44.50"	1.50"

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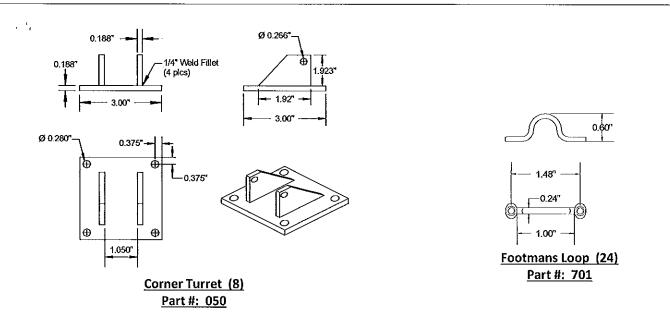
For StormBlok Hurricane Protection System

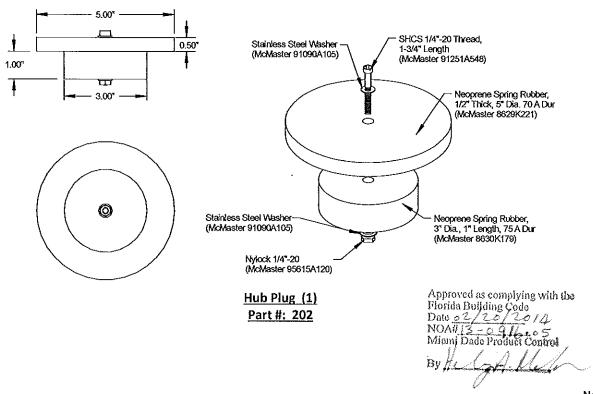
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